

along the east wall, and as one enters both the second and third floors, the real drama of the house unfolds – 35 ft. windows and decks that span the entire west side of the home. The decks themselves are playfully cantilevered in a way that softens what might otherwise be a more stern modern design. The view is a truly exuberant 180 degrees that includes large measures of beach, sky, water, and even the Manhattan Beach pier.

"The idea was to get away from these small little corner decks," Meyer said. "People are always maximizing the floor plate. The real estate agents are telling them more, more, more. My notion here was, 'Look, 1,800 sq. ft. is not a lot, but the place feels a lot bigger because you are really able to open up.' Rather than having a little deck space where you fit maybe two deck chairs, the idea here is this [entire third floor] becomes your deck. The same is true in the two bedrooms on the second floor, which is great, because all of sudden you've got this true blending of indoors and outdoors, which is what California is all about."

"To my knowledge, there is no other expanse like this in the entire Beach Cities where you have 35 ft. of open space – no structures and basically the whole west side of the house is glass. When you are up here during the day it is literally like you are on the deck of a boat. It's amazing. You see all of Malibu, all of Palos Verdes, you see the sail boat races, the surf breaking, the sand..."

The bottom floor of the house also has an indoor/outdoor room that opens right up to the sidewalk. The home is indeed thoroughly modern, but it challenges the assumption that modern design is cold or austere through its sheer conviviality. LeanArch built the home, a methodology that minimizes compromise and maximizes cost control.

"It brings viability to our architectural team because we are designing things we know we can build, and that we know can be built for the amount of money that we say it can be built for," Meyer said.

LeanArch's goals are ambitious. The firm intends nothing less than to redefine the notion of a South Bay home. Meyer said he has taken his cues from other housing types throughout the world in an attempt to design homes that are truly built to fit in locally.

"I point to indigenous architecture as being the prime example of sustainable architecture," he said. "You look at Native American or, around the world, various types of people's structures, whether they are nomadic

or semi-permanent, whether in a hot arid climate or a precipitous climate, people are designing really differently in those places. I found it particularly interesting travelling in Southeast Asia and seeing big broad floorplates that were on stilts with no walls. That really manages the climate in a way that was highly effective and not high technology at all. It inspires me to try to understand climate and the materials you have at your disposal... You know, there is a reason that when people try to take building types and styles and just supplant them and put them in a totally different climate, they don't function. So when somebody comes to me and says I want a Mediterranean or a Cape Cod style, I always say, what is it that you really like about it? Because by building in a modern way you can sort of abstract the quality you like and you can really have whatever you want."

The 9th Street home – which the firm marketed as a "contemporary beach cottage" – has a 3,600 sq. ft. "big brother" project currently underway in north Manhattan Beach. The success of this initial project, Meyer believes, may help developers recognize that a new, greener way is not only possible but profitable.

"I'm hoping by having this kind of house out there, people can see, 'Look, I know I can get my money out of this project.' As an architect, you have to speak developer speak to these guys," Meyer said. "Look, it works to put more money on the front end, because you can get it on the back end. That is half the battle right there."

There is, in other words, a market for building green. Meyer said that local homeowners have the resources and desire to do the right thing, but they need to be given the option.

"It's not just about dollars and cents," he said. "It's about a long term goal of where we want to see this community going. We have an opportunity here in the Beach Cities to be model communities for sustainability. I think everybody wins in the long run when people start to take more responsibility for what they are doing, building houses that are well-designed, that become important pieces of architecture in the neighborhood and that aren't going to be bulldozed in 20 or 30 years, but are going to be around for 75 or 100 years and maybe longer. We are really trying to create viable pieces of architecture that, really, the city and the community deserves." ■



The third floor of LeanArch's recently completed residence, an eco-friendly design on 9th St. in Manhattan Beach. Photo by William Short

### ◀43 LeanArch profile

'What is it about the South Bay that makes it unique?' I wanted to design a home that was really reflective of the beach lifestyle. The thing I was sort of rebelling against with this place was these 5,000 and 8,000 sq. ft. big monsters that have walled in back yards and pools. That is not really what living at the beach is all about, as far as I'm concerned. I really wanted to promote relationships with neighbors and the community. Like back in the day, when you could just stop by and say 'Hi.' I really like that whole nostalgic, kind of idealist, romantic idea of living at the beach."

It wasn't going to be your average spec house, and it was going to be a gamble. His investor would put a million dollars into a project the market for which - high-end and green - was uncertain. Would a prospective homeowner be willing to pay a premium for an eco-designed home outfitted with state-of-the-art green technologies? Then there was the kicker: the lot LeanArch found for the project - on 9th Street in Manhattan Beach between Highland and Manhattan Ave. - was 30 ft. by 45 ft., small even by South Bay standards.

"It was really a huge leap of faith on his part," Meyer said. "He was like, 'You mean we are going to spend \$1 million on a 1,800 sq. ft. house?'"

The gamble paid off. Despite the fact that the house was completed as the housing market went slack, offers started coming in before the home was even completed.

"We had four cash offers, before this thing was even finished, for over \$3 million," Meyer said. "People who are buying in this market know what they are looking for. They want quality, and they want smart design. And you know what? They are going to pay for the latest, to have their house be contemporary in every way...Now we have more people asking, 'When is the next project being completed, and what are you guys doing next?' That is the exact sort of buzz that I really wanted to generate."

The home has a quietly radical design. It has the elements most commonly associated with "green" building - the solar panels on the roof, for example, will "zero out" the electricity bill, Meyer estimates - but the way those elements are integrated into the design is unusual. This isn't a pret-

ty house with a few green design elements imposed upon it. Every last detail of this three-story, three-bedroom house has been built with energy efficiency and long-term ecological concerns in mind.

The home has a cutting-edge thermal heating system embedded in the second and third floors called "Warmboard." It uses aluminum sheeting to conduct heat even more efficiently than concrete floors commonly associated with radiant heating systems. The floors are a Brazilian teak wood called "Eco Timber" cumuru, a fast-growing species that is environmentally certified for its sustainability. The paints used throughout the home are the new Dunn-Edwards "Ecosheild" paints, which contain almost no petrochemical products and none of the toxic solvents found in almost all other paints. Every major appliance is supplied with the home and is state-of-the-art energy efficient. The home's aluminum siding is made from recycled material; even the insulation is made from recycled blue jeans.

But perhaps most central to the design is the fact that the east wall of the west-facing home does not touch the second and third story floors. There is a six-inch gap, which allows for so-called "stack" ventilation. During the summer months, small side vents open to let rising hot air out of the home and allow cool air to rise from the bottom of the house, which is partly submerged in the hill. This "passive" energy efficient design is bolstered by concrete-fiber panels (a product originally made to line kilns) used on the east wall that absorb heat from the skylight above.

"Warm air pockets will build up here during the day, and by opening the side vents that hot air goes right out and pulls up cool air from the lower floor, which is technically a basement and has all concrete floors, so naturally you are going to stay cooler down there," Meyer said. "So you pull cool air up right through the house. It's amazing how well it works. You can literally feel the draw. And in wintertime, you get enough energy up here to build up a little heat. Through the natural daylighting and keeping the vents closed, the warm air builds up and re-radiates back into the space so you can take advantage of it."

That east wall is also central to the home's dramatic aesthetic. The teak stairwell, whose lush warmth is amplified by the natural light, climbs



One of the second floor bedrooms, which both feature open showers similar to those found in many boutique hotels. Photo by William Short

## LeanArch designs an eco-friendly Manhattan Beach home

by Mark McDermott

Kermit was wrong. It is easy being green.

Two years ago, architect James Meyer was approached by a family friend who wanted to invest in a development. Meyer was a 36-year-old architect who founded LeanArch in 2001 with the intent of following his own architectural muse. He'd worked in large firms in San Francisco, Washington D.C. and New York City before finally returning to his native South Bay. He bought a nice little cottage in Manhattan Beach, and his firm - a 12-person design/build team based in Los Angeles - quickly established a reputation for its clean, modern design aesthetic in the high-end home market.

LeanArch had never really been in the development business. But Meyer knew exactly what he wanted to do when the opportunity arose. He'd watched as the character of his north Manhattan Beach neighborhood was undermined, development by development, with beach cottages being replaced by behemoths built mainly with maximizing square footage and with little regard for what came before or would come after.

Meyer thought he knew a better way. LeanArch established a sister

company, called Kuhlhaus Development, whose mission was to "redefine the modern home."

"My concept was we wanted to create a new prototype, or set a new standard, for developer-supplied housing," Meyer said. "We were trying to up the ante...The Beach Cities is a fairly affluent population that really does have conscience but really doesn't have a vehicle to let that be heard. So my concept was to build a house that had really high-end finishes, hand-crafted, and take the opportunity not only to build a beautiful home but to orient it properly to take advantage of sunlight and natural daylighting, and to try to heat and cool it naturally."

The architect wanted to build the most ecologically-friendly high-end home the Beach Cities had ever seen.

"There were three objectives. One is to sort of design passively. Two is to use only the most natural and eco-friendly materials and finishes. The third is to try to incorporate the latest in alternative energy systems...In trying to achieve those three things, I also wanted to say, you know,

►44

## Beach House



*A view of the third floor. The "fire orb" wood burning stove rotates to heat whichever part of the room it is pointed. Photo by William Short*



*An exterior night view of LeanArch's recently completed 9th St. Residence in Manhattan Beach. Photo by William Short*



# Seeing Green

*The architect James Meyer of LeanArch. Photo by Mark McDermott*



The Magazine of South Bay People

# Beach

## Beauty and the Beast

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Photo by Justin Lewis

Coach Featherstone

Star Sailor

Shook and Awe

Green House